

REMARKS

This Amendment is fully responsive to the non-final Office Action dated March 17, 2008, issued in connection with the above-identified application. Claims 18-20 and 22-26 were previously pending in the present application. A request for continued examination (RCE) accompanies this Amendment. With this Amendment, claims 18-20 and 22-26 have been canceled without prejudice or disclaimer to the subject matter therein; and claims 27-30 have been added. Accordingly, claims 27-30 are all the claims currently pending in the present application. No new matter has been introduced by the new claims added. Favorable reconsideration is respectfully requested.

In the Office Action, claims 18, 20 and 22-24 have been rejected under 35 U.S.C. 103(a) as being unpatentable over an article entitled "Information Technology-Coding of Audio-Visual Objects-Part 2: Visual ISO/IEC 14496-2," Second Edition, 2001-12-01 (hereafter "ISO 14496") in view of Winger et al. (U.S. Publication No. 2004/0032907, hereafter "Winger"), and further in view of Tucker et al. (U.S. Patent No. 5,903,313, hereafter "Tucker"); claims 19 and 26 have been rejected under 35 U.S.C. 103(a) as being unpatentable over ISO 14496 in view of Winger and Tucker, and further in view of Peng et al. (U.S. Publication No. 2002/0172284, hereafter "Peng"); and claim 25 has been rejected under 35 U.S.C. 103(a) as being unpatentable over ISO 14496 in view of Winger and Tucker, and further in view of Chen et al. (U.S. Patent No. 7,190,724, hereafter "Chen").

With this Amendment, the Applicants have canceled claims 18-20 and 22-26 thereby rendering the above rejections to those claims moot. Additionally, the Applicants assert that the cited prior art fails to disclose or suggest all the features recited in at least new independent claims 27 and 29. For example, independent claim 27 recites the following features:

"[a] motion compensation method for generating a predictive image of a current macroblock included in a current picture with reference to a motion vector of an adjacent macroblock that is located adjacent to the current macroblock, the motion compensation method comprising:

specifying plural adjacent macroblocks which are located adjacent to the current macroblock and are already decoded;

deriving a motion vector of a current block included in the current macroblock using plural motion vectors of the specified plural adjacent macroblocks;

specifying a co-located macroblock which is co-located with the current macroblock and included in a picture different from the current picture including the current macroblock;

obtaining a motion vector of a corner block located in a corner of the co-located macroblock, when a co-located block is composed of a plurality of blocks for which motion compensation has been performed, the co-located block being co-located with the current block included in the current macroblock and being included in the co-located macroblock;

judging if a size of the obtained motion vector of the corner block is within a predetermined range;

generating a predictive image of the current block which is co-located with the co-located block, based on the result of the judging of whether the size of the obtained motion vector of the corner block is within the predetermined range,

wherein, in the generating of a predictive image of the current block, the generating is performed in such a manner that, if a size of the obtained motion vector is judged within the predetermined range, the predictive image of the current block is generated by setting the motion vector of the current block to be "0", and

the generating is performed in such a manner that, if a size of the obtained motion vector of the corner block is judged beyond the predetermined range, the predictive image of the current block is generated by setting the motion vector of the current block to be the derived motion vector." (Emphasis added).

The features emphasized above in independent claim 27 are similarly recited in independent claim 29. Additionally, the features emphasized above are fully supported by the Applicants' disclosure (see e.g., Figs. 11 and 12).

The present invention, as recited in independent claims 27 and 29, is clearly distinguishable over the cited prior art in that in the motion compensation method and apparatus of the present invention a predictive image of a current block is generated, wherein the generation is performed in such a manner that, if a size of the obtained motion vector is judged within a predetermined range, the predictive image of the current block is generated by setting

the motion vector of the current block to be "0". Additionally, the generation is performed in such a manner that, if a size of the obtained motion vector of the corner block is judged beyond the predetermined range, the predictive image of the current block is generated by setting the motion vector of the current block to be the derived motion vector. No such features are believed to be disclosed or suggested by the cited prior art.

ISO 14496 discloses formation of motion vectors for a direct mode and motion vector decoding, wherein the motion vectors of all of pixels in a co-located macroblock are averaged, and the average is used for motion compensation in the temporal direct mode (see e.g., § 7.6.9.5.2; § 7.6.9.5.1; and § 7.8.7.3).

Winger discloses a temporal direct mode and the use of the motion vectors of the four corner blocks each located in the corner of the co-located macroblock (see e.g., ¶ [0042] and ¶ [0051]).

Tucker discloses that the magnitude of the motion vector is compared with the threshold, and motion compensation is performed only when the magnitude of the motion vector exceeds the threshold (see e.g., Figs. 3 to 4B).

Additionally, neither Peng nor Chen overcomes the deficiencies noted above in ISO 14496, Winger, and Tucker.

Peng et al. teaches a scalable MPEG-2 video decoder with selective motion compensation. And, Chen merely discloses or suggests a method for performing inverse memory compensation.

Based on the above discussion, ISO 14496, Winger, Tucker, Peng and Chen fail to disclose or suggest (individually or in combination) all the features recited in independent claims 27 and 29.

In particular, none of the cited prior art (individually or in combination) discloses or suggests generating a predictive image of the current block, wherein the generating is performed in such a manner that, if a size of the obtained motion vector is judged within the predetermined range, the predictive image of the current block is generated by setting the motion vector of the current block to be "0"; or generating performed in such a manner that, if a size of the obtained motion vector of the corner block is judged beyond the predetermined range, the predictive

image of the current block is generated by setting the motion vector of the current block to be the derived motion vector.

Accordingly, independent claims 27 and 29 are not anticipated or rendered obvious by the cited prior art. Additionally, dependent claims 28 and 30 are not anticipated or rendered obvious by the cited prior art at least by virtue of their respective dependencies from independent claims 27 and 29.

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the Office Action dated August 7, 2008, and pass this application to issue. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

Shinya KADONO et al.

/Mark D. Pratt/

By: 2008.10.31 14:36:57 -04'00'

Mark D. Pratt
Registration No. 45,794
Attorney for Applicants

MDP/ats
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
October 31, 2008